



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,456	01/16/2002	Khoi A. Phan	G0244	6520

7590 11/12/2003

Himanshu S. Amin
Amin & Turocy, LLP
National City Center, 24th Floor
1900 E. 9th Street
Cleveland, OH 44114

EXAMINER

FULLER, RODNEY EVAN

ART UNIT	PAPER NUMBER
----------	--------------

2851

DATE MAILED: 11/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/050,456

Applicant(s)

PHAN ET AL.

Examiner

Rodney E Fuller

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2003 and 30 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 30, 2003 has been entered.

Remarks

2. In response to applicant's Amendment, dated June 30, 2003, the examiner acknowledges the amendments to claims 1, 12, 17 and 23. Claims 1-25 are pending.

3. Regarding the 35 U.S.C. 102(b) rejection of claims 1-25 as being anticipated by Good, et al. (US 4,943,827), the applicant makes the argument that Good "does not teach or suggest a *semiconductor substrate*." (Emphasis added) The examiner has considered the applicant's arguments in light of the amended claims and withdraws the rejection.

4. Regarding the 35 U.S.C. 102(b) rejection of claims 1-25 as being anticipated by Mori, et al. (US 5,610,965), the applicant makes the argument the "subject invention contemplates utilizing a *plurality of temperature sensors* to provide the temperature of *one semiconductor substrate*," and that Mori "discloses employing *one temperature sensor* for one semiconductor substrate." (Emphasis added) The examiner has considered the applicant's arguments in light of the amended claims. However, the examiner maintains that the claimed invention would be obvious in view of Mori.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori, et al. (US 5,610,965).

Mori discloses all the structure set for the claims (see Office Action mailed May 6, 2003), except Mori discloses a single sensor to provide the temperature of a semiconductor substrate, while the claimed invention utilizes "a plurality of temperature sensors." It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a "plurality of temperature sensors," since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St Regis Paper Co. v. Bemis Co.* 193 USPQ 8.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Levinson, et al. (US 6,098,408).

Levinson discloses all the structure set forth in the claims. Regarding independent claims 1, 12, 17 and 23, Levinson discloses "...an exposing source (Fig. 6, ref.# 130) operative to expose a semiconductor substrate (Fig. 6, ref.# 150); a plurality of temperature sensors (column 3, lines 23-24) operative to proximally sense temperature characteristics of the semiconductor substrate, including during an exposure cycle; and a control system (Fig 5, ref.# 60) operative to receive temperature information indicative of the temperature characteristics sensed by the plurality of temperature sensors, the control system being proactively operative to control the exposing source based on the temperature information (abstract)."

Regarding the dependent claims, Levinson likewise discloses all the structure set forth in the claims.

9. Claims 1-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyai, et al. (US 5,581,324).

Miyai discloses all the structure set forth in the claims. Regarding independent claims 1, 12, 17 and 23, Miyai discloses "...an exposing source (Fig. 1, ref.# 1)) operative to expose a semiconductor substrate (Fig. 1, ref.# W); a plurality of temperature sensors (column 8, lines 40-43) operative to proximally sense temperature characteristics of the semiconductor substrate, including during an exposure cycle; and a control system (Fig. 1, ref.# 20) operative to receive temperature information indicative of the temperature characteristics sensed by the plurality of temperature sensors, the control

system being proactively operative to control the exposing source based on the temperature information (abstract).”

Regarding the dependent claims, Miyai likewise discloses all the structure set forth in the claims.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney E Fuller whose telephone number is 703-306-5641. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on 703-308-1436. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

Rodney E Fuller
Primary Examiner
Art Unit 2851



November 6, 2003